



## **FACT SHEET: CARBON CAPTURE USE AND STORAGE ACTION GROUP**

At the Clean Energy Ministerial in Washington, D.C. on July 19<sup>th</sup> and 20<sup>th</sup>, ministers pledged to establish a **Carbon Capture Use and Storage Action Group** to be led by the United Kingdom and Australia to facilitate political and business leadership and develop a Global Strategic Implementation Plan to examine how to overcome key barriers to the deployment of Carbon Capture Use and Storage (CCUS).<sup>1</sup>

The Action Group comprises of Australia, Canada, China, France, Germany, Japan, Korea, Mexico, Norway, South Africa, the United Arab Emirates, the United Kingdom, and the United States. Business and institutional partners include Aker Clean Carbon, the Carbon Capture and Storage Association, the Center for American Progress, the Global Carbon Capture and Storage Institute, the International Energy Agency, Sasol, Scottish Power, Shell, the World Coal Institute, and the World Resources Institute. The Action Group welcomes involvement of further partners.

Carbon Capture and Storage (CCS) will need to play a substantial role in mitigating global emissions alongside other measures including renewables and energy efficiency. The challenges for CCS are unprecedented and the timeframes are short if we are to avoid lock-in to infrastructure with high CO<sub>2</sub> emissions. According to the International Energy Agency (IEA), up to a fifth of mitigation in 2050 will need to come from CCS in the power and industrial sectors, equating to some 3,400 projects. To achieve this, the IEA suggests that 100 projects will need to be operational by 2020.

Although there has been significant progress and commitments to develop CCUS technology, the Major Economies Forum Technology Action Plan on CCUS and the IEA/Carbon Sequestration Leadership Forum (CSLF) report on CCS progress to the 2010 G8 Summit both highlight key barriers to achieving global deployment by 2020.

Through the Global Strategic Implementation Plan, governments, businesses, and organisations will develop recommendations for the next Clean Energy Ministerial on overcoming barriers to CCS deployment under five key themes: strategic direction, financing, use and storage, regulation, and knowledge sharing.

To kick start the Action Group, a number of countries have also announced new activities to progress these themes:

### **Use and Storage**

1. The United States has announced the selection of five new projects in the third round of the Clean Coal Power Initiative program. The projects will demonstrate advanced coal technologies with carbon capture utilization and storage at commercial scale. These projects represent an investment of more than US\$1.25 billion, including funds from the American Recovery and

---

<sup>1</sup> In the context of the Clean Energy Ministerial, 'use' of CO<sub>2</sub> is also being considered alongside storage, recognizing that this can provide opportunities for piloting capture technologies. This covers processes such as Enhanced Oil Recovery, and production of aggregates for the building industry.

Reinvestment Act, which will be leveraged by more than US\$4.5 billion in private capital cost share. When operating, the five projects will capture and sequester or beneficially reuse a total of nearly 8 million tons of CO<sub>2</sub> per year.

2. The United States will be selecting key projects for pilot scale development for phase two of the Industrial CCS (ICCS) program, which is part of a US\$1.4 billion effort to capture CO<sub>2</sub> from industrial sources for storage or beneficial use.
3. The United States of America and Australia launched a project to examine CO<sub>2</sub> reuse opportunities and their commercial value, which could play a transitional incentive to offset the cost of capture. This will be supported by a UK-funded study on the abatement potential of CO<sub>2</sub> Enhanced Oil Recovery with permanent storage.
4. South Africa announced a new national storage atlas which will be published in August, which sets out a high-level storage assessment of South Africa. This will be further developed through a collaboration with the UK to map selected basins in detail.
5. The North American Carbon Atlas Partnership (NACAP), comprised of Canada, Mexico, and the United States, announced the development of an atlas of North America that identifies the major sources of CO<sub>2</sub> and the potential geological formations available for its storage. They have agreed to compatible methodologies and identified geological basins suitable for storing CO<sub>2</sub>, and are working to ensure that the applicable information technology systems in our respective countries can be linked to provide the complete North American database.
6. The UK, Norway, and Germany announced the findings of a study on behalf of the North Sea Basin Task Force (which also includes the Netherlands), highlighting that the North Sea Basin could play a significant role in the deployment of CCS in Europe and that cross-border CO<sub>2</sub> transport and storage would be an important factor in the North Sea Area if CCS is deployed widely from 2020.
7. The United States and Canada announced US\$5.2 million in new funding for the Weyburn-Midale CO<sub>2</sub> Monitoring and Storage Project, which will further the knowledge and research in measurement, monitoring and verification of CO<sub>2</sub> storage in depleted oil reservoirs, and the creation of a Best Practices Manual to guide all aspects of CO<sub>2</sub> geological storage projects in depleted oil fields worldwide.

## **Regulation**

1. The Action Group acknowledged the principles developed by the IEA/CSLF in cooperation with the Global CCS Institute on CCS readiness and will consider them in developing locally appropriate guidelines.
2. The UK will support Indonesia in undertaking a study on the feasibility of designing new coal- and gas-fired units as CO<sub>2</sub> capture-ready in Indonesia, with a report due in March 2011.

## **Knowledge Sharing**

1. The Action Group acknowledged principles developed by the IEA/CSLF in cooperation with the GCCSI on knowledge sharing and agreed to consider how they can be taken forward as part of the Action Group.

A considerable amount of work is already underway through existing forums such as the IEA, the CSLF and the Global CCS Institute. The Action Group will complement and build on these activities and request the IEA, CSLF, and Global CCS Institute to continue to provide analysis as necessary, and to track the progress of CCS development. As part of this support, the Global CCS Institute is developing a

July 20, 2010

stocktake of progress against the MEF Technology Action Plan to highlight what is already being done and identify gaps. This will provide useful input to the Action Group's upcoming work.